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Product datasheet for TP505366

Hmces (NM_173737) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse 5-hydroxymethylcytosine (hmC) binding, ES cell specific (Hmces), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR205366 protein sequence Red=Cloning site Green=Tags(s) MCGRTSCHLPREVLTRACAYQDRQGRRRLPQWRDPDKYCPSYNKSPQSSSPVLLSRLHFEKDADSSDRII IPMRWGLVPSWFKESDPSKLQFNTTNCRSDTIMEKQSFKVPLGKGRRCVVLADGFYEWQRCQGTNQRQPY FIYFPQIKTEKSGGNDASDSSDNKEKVWDNWRLLTMAGIFDCWEAPGGECLYSYSIITVDSCRGLSDIHS RMPAILDGEEAVSKWLDFGEVATQEALKLIHPIDNITFHPVSPVVNNSRNNTPECLAPADLLVKKEPKAN GSSQRMMQWLATKSPKKEVPDSPKKDASGLPQWSSQFLQKSPLPAKRGATSSFLDRWLKQEKEDEPMAKK PNS TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-MYC/DDK
Predicted MW:	40.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_776098
Locus ID:	232210
UniProt ID:	Q8R1M0

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RefSeq Size:	1422
Cytogenetics:	6 D1
RefSeq ORF:	1062
Synonyms:	8430410A17Rik; C85376
Summary:	Sensor of abasic sites in single-stranded DNA (ssDNA) required to preserve genome integrity by promoting error-free repair of abasic sites (By similarity). Acts as an enzyme that recognizes and binds abasic sites in ssDNA at replication forks and chemically modifies the lesion by forming a covalent cross-link with DNA (By similarity). The HMCES DNA-protein cross-link is then degraded by the proteasome (By similarity). Promotes error-free repair of abasic sites by acting as a 'suicide' enzyme that is degraded, thereby protecting abasic sites from translesion synthesis (TLS) polymerases and endonucleases that are error-prone and would generate mutations and double-strand breaks (By similarity). Acts as a protease: mediates autocatalytic processing of its N-terminal methionine in order to expose the catalytic cysteine (PubMed:29020633). Specifically binds 5-hydroxymethylcytosine (5hmC)-containing DNA in stem cells (PubMed:23434322). May act as an endonuclease that specifically cleaves 5hmC-containing DNA; additional experiments are however required to confirm this activity in vivo (PubMed:29020633).[UniProtKB/Swiss-Prot Function]